

### UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

March 30, 2006

PERMAN & GREEN, LLP 425 POST ROAD FAIRFIELD, CT 06824 US

Dear Sir/Madam,

Your refund request for 10804505 in the amount of \$300.00 has been denied .

We do not refund money on claims that are withdrawn.

Sincerely,

ELEANOR KURTZ Technical Center Others 703 308-9010 x177

PATENT MAINTENANCE DIMSION

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

203 HAR 10 PH 4: 57

APPLICANT(s): Altisen, R.C.

US PATENT & TRADEMARK

OFFICE

SERIAL NO.:

10/804,505

ART UNIT: 1626

FILING DATE:

03/19/2004

EXAMINER: Freistein, A.B.

TITLE:

SUBSTITUTED AZETIDINE COMPOUNDS, THERE

PREPARATION AND USE AS MEDICAMENTS

ATTORNEY

DOCKET NO.:

785-011733-US (PAR)

Refund Section, Accounting Division, Office of Finance Mail Stop 16 Commissioner of Patents P.O. Box 1450 Alexandria, VA 22313-1450

### PETITION FOR REFUND TO DEPOSIT ACCOUNT

Sir:

Pursuant to 37 C.F. R. §1.26, Applicant, requests that the amount of \$300.00 be refunded to Deposit Account #16-1350. Applicant disputes the charge listed below:

01/30/06 10804505 785-011733-US (PAR) 1202 \$300.00

A copy of the Deposit Account statement is attached hereto.

The charge should not have been made. The application was originally filed with 22 claims, only 1 being independent. The amendment filed on 6 Jan 2006 had 6 new dependent claims added although 12 dependent claims were withdrawn. Thus, there is no basis for the charge.

Accordingly the amount of 300.00 should be refunded to Deposit Account #16-1350.

Respectfully submitted,

Geza C Ziegler, Jr.

Reg. No. 44,004

28 Feb 2004

Perman & Green, LLP 425 Post Road Fairfield, CT 06824 (203) 259-1800 Customer No.: 2512

### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date indicated below as first class mail in an envelope addressed to Refund Section, Accounting Division, Office of Finance, Mail Stop 16, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: 31006

Signature: Remarch backup Person Making Deposit

PATENT MAINTENANCE DIMSION

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APPLICANT(s): Altisen, R.C.

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Date: 31000 Signature: Roman Belonchia Person Making Deposit





### **Deposit Account Statement**

Requested Statement Month:

January 2006

**Deposit Account Number:** 

161350

Name:

**PERMAN & GREEN** 

Attention:

WILLIAM G. HOFFMAN

Address:

425 POST ROAD

City:

FAIRFIELD

State:

СТ

Zip:

06430

Country:

UNITED STATES OF AMERICA

	DATE	SEQ	POSTING REF TXT	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
	04/04	00	14044000				
	01/04		11211236	390P0114936-US(PAR)		\$120.00	\$17,562.71
	01/05		10019330	442-010757US	1253	\$980.00	\$16,582.71
	01/06		10225038	20011254/860	1201	\$600.00	\$15,982.71
	01/06		5704153	252-006305-US (PAR)	1552	\$2,300.00	\$13,682.71
	01/06		5704153	252-006305-US (PAR)	1555	\$130.00	\$13,552.71
	01/12		10108661	324-010888-U	1202	\$300.00	\$13,252.71
	01/13		09779979	324-010126-U	1806	\$180.00	\$13,072.71
	01/17		10606253	200-007048-US(C02)	1253	\$1,020.00	\$12,052.71
	01/17	136	10606253	200-007048-US(C02)	1202	\$400.00	\$11,652.71
	01/18	1	10159726	390-009059-US(PAR)	1253	\$1,020.00	\$10,632.71
	01/18	9	09856746	297-010346-U	1202	-\$1,350.00	\$11,982.71
	01/18	10	09856746	297-010346-U	1202	\$150.00	\$11,832.71
	01/18	11	09856746	297-010346-U	1201	\$1,200.00	\$10,632.71
	01/19	114	09802621	•	9204	-\$20.00	\$10,652.71
	01/20	4	09719607	770P009578-U	1252	\$450.00	\$10,202.71
	01/20	9	09802621	•	9204	-\$10.00	\$10,212.71
	01/20	1507	78795602	1019-002563-US(-TM)	7001	\$325.00	\$9,887.71
	01/24	209	10768556	770-011466-US(PAR)	1251	\$120.00	\$9,767.71
	01/25	3	09842563	•	1402	\$500.00	\$9,267.71
1	01/25	4	09399288 °		1201	\$600.00	\$8,667.71
-	01/26	399	10523616		9204		\$8,767.71
(	01/27	1	10023559		1201		\$8,567.71
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Ú	1/90	G.def			1202		\$8,217.71
7	77/31 2	15	E-REPLENISHMENT		9203	-	\$13,217.71

START BALANCE \$17,682.71 SUM OF CHARGES \$10,945.00 SUM OF END REPLENISH BALANCE \$6,480.00 \$13,217.71

785-011733-US(PAR) GCZ ATTORNEY DOCKET NO. ATTY	SECY DATE MALLED,
SERTAL NO. 10/804,505	HECK FOR \$
Amendment ( page(s))	Certificate of Mailing IDS; PTO-1449, references  Lease Fee Appeal Brief (in triplicate) ( page(s)) Assignment Cover Sheet Declaration & Power of Attorney Notice of Appeal Putition & Fee for Extension of Time Let: Calling Attention To Error in Patent
Request for Corrected Filing Receipt	Completion of FIRing Requirements

Receipt is hiereby acknowledged of the papers/fees as identified:
Commissioner of Patents & Trademarks

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(s): Rosa Cuberes Altisen

SERIAL NO.: 10/804,505 ART UNIT: 1626

FILING DATE: 03/19/2004 EXAMINER: Freistein, Andrew B.

TITLE: SUBSTITUTED AZETIDINE COMPOUNDS, THEIR PREPARATION

AND USE AS MEDICAMENTS

ATTORNEY

DOCKET NO .: 785-011733-US PAR

MAIL STOP AMENDMENT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### **AMENDMENT**

#### I. INTRODUCTION

This is in response to the Office Action mailed December 6, 2005 in regard to the above-identified patent application.

Please amend the Application as follows:

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### II. CLAIM AMENDMENTS

1. (Currently Amended) Substituted Azetidine compounds of general formula I,

wherein

A represents a -C=0-moiety, a -CH<sub>2</sub>-moiety, a-CH<sub>2</sub>-C=0-moiety bonded to the azetidine ring via its carbonyl carbon atom, or a -O-C(=0)-moiety bonded to the azetidine ring via its carbonyl carbon atom,

 $R^1$ ,  $R^3$ , identical or different, represent a hydrogen atom or a linear or branched, saturated or unsaturated  $C_{1-4}$ -aliphatic group,

 $\ensuremath{\text{R}^2}$  represents a hydrogen atom, a hydroxyl group or a  $\ensuremath{\text{C}_{1\text{-}3}\text{-}}$  alkoxy group,

or  $R^1$  and  $R^2$  or  $R^2$  and  $R^3$  together form an  $-O-CH_2-CH_2-\underline{moiety}$  chain, which is optionally substituted with one or more methyl groups

with the proviso that  $R^1$ ,  $R^2$  and  $R^3$  do not identically represent a hydrogen atom, and if A represents a  $-CH_2-$ 

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moiety, then at least two of the residues  $R^1$ ,  $R^2$  and  $R^3$  do not identically represent a hydrogen atom,

 $R^4$  represents a hydrogen atom, an optionally at least monosubstituted aryl group, or a linear or branched, saturated or unsaturated aliphatic group, which may be substituted by one or more substituents independently selected from the group consisting of hydroxy, fluorine, chlorine, bromine, branched or unbranched  $C_{1-4}$ -alkoxy, branched or unbranched  $C_{1-4}$ -perfluoroalkoxy and branched or unbranched  $C_{1-4}$ -perfluoroalkyl,

 $R^5$  represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic group, an -OR7-moiety, -an -NH2-moiety, a -CO-NH2-moiety, an -NH-CO-R<sup>8</sup>-moiety, an -N(OH)-CO-NH2-moiety, an -O(CH2)<sub>1-4</sub>-ONO<sub>2</sub>-moiety, an optionally at least mono-substituted aryl group, or a carboxy-group,

 $R^6$  represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic group, an -OR $^7$ -moiety, -an -NH $_2$ -moiety, a -CO-NH $_2$ -moiety, an -NH-CO-R $^8$  -moiety, an -N(OH)-CO-NH $_2$ -moiety, an optionally at least mono-substituted aryl group, or a carboxy-group,

 $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$ , independent from one another, represent a linear or branched, saturated or unsaturated, optionally at least mono-substituted aliphatic group,

with the provisos

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that if A represents a -(C=0)-moiety,  $R^4$  represents a hydrogen atom and one of the residues  $R^5$  and  $R^6$  represents a hydrogen atom, then the other one of these residues  $R^5$  and  $R^6$  does not represent an  $-NH_2$ -moiety, a  $-CONH_2$ -moiety, or a methyl group, which is substituted by an  $-NH_2$ -moiety or an azaheterocycle, and

if A represents a -C=O-moiety, a -CH<sub>2</sub>-C=O-moiety bonded to the azetidine ring via its carbonyl carbon atom, or a -O-C(=O) - moiety bonded to the azetidine ring via its carbonyl carbon atom and one of the residues  $R^5$  and  $R^6$  represents a hydrogen atom or an optionally at least mono-substituted, linear or branched, saturated or unsaturated aliphatic group, then the other one of these residues  $R^5$  and  $R^6$  does not represent an -NH<sub>2</sub>- or a COOH-moiety,

optionally in form of one of the stereoisomers, preferably enantiomers or diastercomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastercomers, in any mixing ratio, or a corresponding salt thereof, or a corresponding solvate thereof.

- 2. (Original) Compounds according to claim 1, characterized in that  $R^1$  and  $R^3$ , identical or different, represent a hydrogen atom or a linear or branched  $C_{1-4}$ -alkyl group.
- 3. (Currently Amended) Compounds according to claim 1, characterized in that  $R^1$  and  $R^3$  are identical and represent a  $C_{1-4}$  alkyl group, preferably a  $C_{3-4}$ —alkyl group, more preferably an iso-propyl group or a tert. Butyl group.

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- 4. (Previously Presented) Compounds according to claim 1, characterized in that  $R^2$  represents a hydrogen atom, a hydroxyl group or a methoxy group.
- 5. (Previously Presented) Compounds according to claim 1, characterized in that  $R^4$  represents a hydrogen atom, an optionally at least mono-substituted phenyl group, or a linear or branched, saturated or unsaturated  $C_{1-6}$  aliphatic group, whereby said aliphatic group may be substituted by one or more substituents independently selected from the group consisting of hydroxy, fluorine, chlorine, bromine, branched or unbranched  $C_{1-4}$  alkoxy, branched or unbranched  $C_{1-4}$ —perfluoroalkoxy and branched or unbranched  $C_{1-4}$ —perfluoroalkyl, preferably a hydrogen atom, a methyl group or an unsubstituted phenyl group.
- (Currently Amended) Compounds according to claim 5, 6. characterized in that  ${\ensuremath{R}}^5$  represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched, saturated or unsaturated, optionally at least substituted  $C_{1-6}$  aliphatic group, an  $-NH_2$ -moiety, a  $-CO-NH_2$ moiety, an  $-NH-CO-R^8$ -moiety, an  $-N(OH)-CO-NH_2$ -moiety, an - $O(CH_2)_4$ - $ONO_2$ -moiety, an optionally at least mono-substituted phenyl group, or a carboxy-group, preferably a hydrogen atom, a bromine atom, a hydroxyl group, an  $-NH_2$ -moiety, a - $CO-NH_2$ -moiety, an  $-NHCO-R^8$ -moiety, an  $-N(OH)-CO-NH_2$ -moiety, an  $-O(CH_2)_4-ON$   $O_2-$  moiety, an unsubstituted phenyl group, or a carboxy-group.
- 7. (Currently Amended) Compounds according to claim 1, characterized in that  $R^6$  represents a hydrogen atom, a halogen atom, a hydroxyl group, a linear or branched,

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saturated or unsaturated, optionally at least monosubstituted  $C_{1-6}$  aliphatic group, an  $-NH_2$ -moiety, a  $-CO-NH_2$ -moiety, an  $-NH-CO-R^8$ -moiety, an  $-N(OH)-CO-NH_2$ -moiety, an optionally at least mono-substituted phenyl group, or a carboxy- group, preferably a hydrogen atom, a hydroxyl group or a methyl-group.

- 8. (Currently Amended) Compounds according to claim 1, characterized in that  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$ , independent from one another, represent a linear or branched, saturated or unsaturated, optionally at least mono-substituted  $C_{1-6}$  aliphatic group, preferably a linear or branched  $C_{1-6}$  alkyl group, more preferably a methyl group or an ethyl group.
- 9. (Currently Amended) Compounds according to claim 1 of general formula I

### wherein

A represents a -C=0-moiety, a  $-CH_2$ -moiety, a  $-CH_2$ -C=0-moiety bonded to the azetidine ring via its carbonyl carbon atom, or a -O-C(=0)-moiety bonded to the azetidine ring via its carbonyl carbon atom,

 ${\ensuremath{\mathsf{R}}}^1,\ {\ensuremath{\mathsf{R}}}^3$  both identically represent an iso-propyl group or a tert-butyl group,

 ${\ensuremath{\mathsf{R}}}^2$  represents a hydrogen atom, a hydroxyl group or a methoxy group,

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or  $R^1$  and  $R^2$  or  $R^2$  and  $R^3$  together form an  $-Q-CH_2-C(CH_3)_2$ -chain, whereby the oxygen atom of said chain is bonded to the 4- position of the phenyl ring,

R<sup>4</sup> represents a hydrogen atom, a methyl group or an unsubstituted phenyl group,

 $R^5$  represents a bromine atom, a hydroxyl group, -an -NH<sub>2</sub>-moiety, a -CO-NH<sub>2</sub>-moiety, an -NH-CO-CF<sub>3</sub>-moiety, an -N(OH) - CO-NH<sub>2</sub>-moiety, an -O(CH<sub>2</sub>)<sub>4</sub>ONO<sub>2</sub>-moiety, an unsubstituted phenyl group, or a carboxy-group,

 ${\ensuremath{\mathsf{R}}}^6$  represent a hydrogen atom, a methyl group or a hydroxyl group,

optionally in form of one of the stereoisomers, preferably enantiomers or diastercomers, a racemate or in form of a mixture of at least two of the stereoisomers, preferably enantiomers and/or diastercomers, in any mixing ratio, or a corresponding salt thereof, or a corresponding solvate thereof.

- 10. (Previously Presented) Compounds according to claim 1 selected from the group consisting of
- [1] (3,5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy-azetidin-1-yl)-methanone;
- [2] (3,5-di-tert-butyl-phenyl)-(3-hydroxy-azetidin-1-yl)methanone;
- [3] (3,5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy-3-methyl-azetidin-1-yl)-methanone;

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- [4] (3,5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy-2-methyl-azetidin-1-yl)-methanone;
- [7] (3-Bromo-azetidin-1-yl)-(3,S-di-tert-butyl-4-hydroxy-phenyl)-methanone;
- [9] (3,5-di-tert-butyl-4-methoxy-phenyl)-(3-hydroxy-azetidin-1-yl)-methanone;
- [10] (3-hydroxy-azetidin-1-yl)-(4-hydroxy-3,S-diisopropyl-phenyl)-methanone;
- [11] (3,5-di-tert-butyl-phenyl)-[3-(4-nitrooxy-butoxy)azetidin-1-yl]-methanone;
- [12] (3,5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy-2-phenyl-azetidin-1-yl)-methanone;
- [13] (3,5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy-3-phenyl-azetidin-1-yl)methanone;
- [14] (7-tert-buty1-3,3-dimethy1-2-3-dihydro-benzofuran-S-y1)-(3-hydroxy-azetidin-1-y1)-methanone;
- [15] [1-(3,5-di-tert-butyl-4-hydroxy-benzyl)-azetidin-3-yl]-N-hydroxy-urea;
- [16] N-[1-(3,5-di-tert-butyl-4-hydroxy-benzoyl)-(2S,3R)-2-methyl-azetidin-3-yl]-2,2,2-trifluoro-acetamide;
- [17] 1-(3,5-di-tert-butyl-4-hydroxy-benzyl)-azetidin-3-ol;
- [18] 2-(3,5-di-tert-butyl-4-hydroxy-phenyl)-1-(3-hydroxy-azetidin-1-yl)-ethanone;
- [19] (3-hydroxy-azetidine-1-carboxylicacid)-3,5-di-tert-butyl-phenyl ester

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optionally in form of a corresponding salt or a corresponding solvate.

11. (Withdrawn) Process for the preparation of substituted azetidine compounds of general formula I according to of claiml, characterized in that at least one compound of general formula II,

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wherein R1-R3 have the meaning according to claim1, X represents a bond or an  $-(CH_2)$ -moiety and R represents a carboxy group or an activated carbonyl group, is reacted with at least one compound of general formula III,

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optionally in the form of a corresponding salt, wherein  $R^4$ -  $R^6$  have the meaning according to <u>claim</u> 1, to yield a compound of general formula I according to claim 1, wherein A represents a -(C=0)-moiety or an  $-(CH_2)$ -CO-moiety, which is optionally purified and/or optionally isolated,

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and optionally at least one compound of general formula I according to claim 1, wherein A represents a -(C=0)-moiety is reduced to yield at least one compound of general formula I according to claim 1, wherein A represents a  $-(CH_2)$ -moiety, which is optionally purified and/or isolated, or at least one compound of general formula IV,

wherein R<sup>1</sup>-R<sup>3</sup> have the meaning according to claim 10, is reacted with at least one compound of general formula III given above, to yield at least one compound of general formula I according to claim 1, wherein A represents an O-(C=O)-moiety, and said compound is optionally purified and/or optionally isolated.

- 12. (Withdrawn) Medicament comprising at least one substituted azetidine compound according to of claim 1 and optionally one or more pharmaceutically acceptable excipients.
- 13. (Withdrawn) Medicament according to claim 12 for the inhibition of Cyclooxygenase-1, for the prophylaxis and/or treatment of Cyclooxygenase-1 related disorders, for the inhibition of Cyclooxygenase-2 and/or for the prophylaxis and/or treatment of Cyclooxygenase-2 related disorders. 11

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14. (Withdrawn) Medicament according to claim 12 for the prophylaxis and/or treatment of pain, for the prophylaxis and/or treatment of inflammation and/or for the prophylaxis and/or treatment of inflammation related disorders, whereby said inflammation-related disorders may preferably selected from the group consisting of arthritis, rheumatoid arthritis, spondyloarthropathies, gouty osteoarthritis, systemic lupus erythematosus, juvenile arthritis, rheumatic fever, symptoms associated with influenza or other viral infections, common cold, lower back pain, neck pain, dysmenorrhea, headache, toothache, sprains, strains, myositis, neuralgia, synovitis, ankylosing spondylitis, bursitis, edema, inflammations following dental procedures, inflammations following dental procedures, vascular diseases, migraine headaches, periarteritis nodosa, thyroiditis, aplastic Hodkin's disease, sclerodoma, type I diabetes, myasthenia gravis, sarcoidosis, nephrotic syndrome, Behcet's syndrome. polymyositis, gingivitis, hypersensivity, conjunctivitis, swelling ocurring after injury and myocardia ischemia, for the prophylaxis and/or treatment of asthma, for the prophylaxis and/or treatment of bronchitis, for the prophylaxis and/or treatment of tendinitis, for the prophylaxis and/or treatment of bursitis, for the prophylaxis and/or treatment of skin related conditions, whereby said skin related conditions may preferably be selected from the group consisting of psoriasis, eczema, burns and dermatitis, for the prophylaxis and/or treatment of gastrointestinal disorders, whereby said gastrointestinal disorders may preferably be selected from the group consisting of inflammatory bowel disease, Crohn's

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disease, gastritis, irritable bowel syndrome and ulcerative colitis, or for treatment of fever, or for the propylaxis and/or treatment of cancer or a cancer-related disorders, whereby said cancer or related disorder may preferably be selected from the group consisting of brain cancer, bone cancer, epithelial cell-derived neoplasia (epithelial carcinoma), basal cell carcinoma, adenocarcinoma, gastrointestinal cancer, lip cancer, colon cancer, liver cancer, bladder cancer, pancreas cancer, ovary cancer, cervical cancer, lung cancer, breast cancer, skin cancer, squamous cell cancer, prostate cancer, renal cell carcinoma other known cancers that effect epithelial cells throughout the body, for the prophylaxis and/or treatment polyps, for the prophylaxis and/or treatment angiogenesis mediated disorders, preferably selected from the group consisting of metastasis, corneal graft rejection, ocular neovascularization, neovascularisation, diabethic retinopathy, retrolenital fibroplasia, neovascular glaucoma, gastric ulcer, infantile hemaginomas, angiofibroma of the nasopharynx, avascular necrosis of the bone and endometriosis.

- 15. (Withdrawn) Medicament according to claim 12 for the prophylaxis and/or treatment of pain.
- 16. (Withdrawn) Medicament according to claim 12 for the prophylaxis and/or treatment of inflammation.
- 17. (Withdrawn) Medicament according to claim12 for the prophylaxis and/or treatment of inflammation disorders, whereby said inflammation- related disorders may preferably be selected from the group consisting

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arthritis, rheumatoid arthritis, spondyloarthropathies, gouty arthritis, osteoarthritis, systemic lupus erythematosus, juvenile arthritis, rheumatic fever, symptoms associated with influenza or other viral infections, common cold, lower back pain, neck pain, dysmenorrhea, headache, toothache, sprains, strains, myositis, neuralgia, synovitis, gout, ankylosing spondylitis, bursitis, edema, inflammations following dental procedures, inflammations following dental procedures, vascular diseases, migraine headaches, periarteritis nodosa, thyroiditis, aplastic anemia, Hodkin's disease, sclerodoma, type I diabetes, myasthenia gravis, sarcoidosis, nephrotic syndrome, Behcet's syndrome, polymyositis, gingivitis, hypersensivity, conjunctivitis, swelling ocurring after injury and myocardia ischemia.

- 18. (Withdrawn) Use of at least one substituted azetidine compound according to claim 1 and optionally one or more pharmaceutically acceptable excipients, for the preparation of a medicament for the inhibition of Cyclooxygeflase-1, for the prophylaxis and/or treatment of Cyclooxygenase-1 related disorders, for the inhibition of Cyclooxygenase-2 and/or for the prophylaxis and/or treatment of Cyclooxygenase-2 related disorders.
- 19. (Withdrawn) Use of at least one substituted azetidine compound according to claim 1 and optionally one or more pharmaceutically acceptable excipients for the prophylaxis and/or treatment of pain, for the prophylaxis and/or treatment of inflammation and/or for the prophylaxis and/or treatment of inflammation related disorders,

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whereby said inflammation-related disorders may preferably selected from the group consisting of arthritis, rheumatoid arthritis, spondyloarthropathies, arthritis, osteoarthritis, systemic lupus erythematosus, juvenile arthritis, rheumatic fever, symptoms associated with influenza or other viral infections, common cold, lower back pain, neck pain, dysmenorrhea, toothache, sprains, strains, myositis, neuralgia, synovitis, gout, ankylosing spondylitis, bursitis, edema, inflammations following dental procedures, inflammations following dental procedures, vascular diseases, migraine headaches, periarteritis nodosa, thyroiditis, aplastic anemia, Hodkin's disease, sclerodoma, type I diabetes, myasthenia gravis, sarcoidosis, nephrotic syndrome, Behcet' syndrome, polymyositis, gingivitis, hypersensivity, conjunctivitis, swelling ocurring after injury myocardia ischemia, for the prophylaxis and/or treatment of asthma, for the prophylaxis and/or treatment of bronchitis, for the prophylaxis and/or treatment of tendinitis, for the prophylaxis and/or treatment of bursitis, for prophylaxis and/or treatment of skin related conditions, whereby said skin related conditions may preferably be selected from the group consisting of psoriasis, eczema, burns and dermatitis, for the prophylaxis and/or treatment of gastrointestinal disorders. whereby gastrointestinal disorders may preferably be selected from the group consisting of inflammatory bowel disease, Crohn's disease, gastritis, irritable bowel syndrome and ulcerative colitis, or for treatment of fever, or for the prophylaxis and/or treatment of cancer or a cancer-related disorders, whereby said cancer or related disorder may preferably be

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selected from the group consisting of brain cancer, bone cancer, epithelial cell-derived neoplasia (epithelial carcinoma), basal cell carcinoma, adenocarcirioma, gastrointestinal cancer, lip cancer, colon cancer, liver cancer, bladder cancer, pancreas cancer, ovary cancer, cervical cancer, lung cancer, breast cancer, skin cancer, squamous cell cancer, prostate cancer, renal cell carcinoma and other known cancers that effect epithelial cells throughout the body, for the prophylaxis and/or treatment polyps, for the prophylaxis and/or treatment angiogenesis mediated disorders, preferably selected from group consisting of metastasis, corneal rejection, ocular neovascularization, retinal neovascularisation, diabethic retinopathy, retrolental fibroplasia, neovascular glaucoma, gastric ulcer, infantile hemaginomas, angiofibroma of the nasopharynx, avascular necrosis of the bone and endometriosis.

- 20. (Withdrawn) Use of at least one substituted azetidine compound according to claim 1 and optionally one or more pharmaceutically acceptable excipients for the prophylaxis and/or treatment of pain.
- 21. (Withdrawn) Use of at least one substituted azetidine compound according to <u>claim 1</u> and optionally one or more pharmaceutically acceptable excipients for the prophylaxis and/or treatment of inflammation.
- 22. (Withdrawn) Use of at least one substituted azetidine compound according to claims 1 and optionally one or more pharmaceutically acceptable excipients for the prophylaxis and/or treatment of inflammation related disorders, whereby

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inflammation-related disorders may preferably said selected from the group consisting of arthritis, rheumatoid arthritis, spondyloarthropathies, gouty arthritis, osteoarthritis, systemic lupus erythematosus, juvenile arthritis, rheumatic fever, symptoms associated influenza or other viral infections, common cold, back pain, neck pain, dysmenorrhea, headache, toothache, sprains, strains, myositis, neuralgia, synovitis, ankylosing spondylitis, bursitis, edema, inflammations following dental procedures, inflammations following dental procedures, vascular diseases, migraine headaches, periarteritis nodosa, thyroiditis, aplastic anemia, Hodkin's disease, sclerodoma, type I diabetes, myasthenia gravis, sarcoidosis, nephrotic syndrome, Behcet s syndrome, polymyositis, gingivitis, hypersensivity, conjunctivitis, swelling ocurring after injury and myocardia ischemia.

- 23. (New) Compounds according to claim 1 where the stereoisomers are enantiomers or diastereomers.
- 24. (New) Compounds of claim 3 where the  $C_{1\text{--}4\text{--}}$  alkyl group, is a  $C_{3\text{--}4}$  alkyl group.
- 25. (New) Compounds of claim 3 where a  $C_{1\text{--}1}\text{--}$  alkyl group, is an iso-propyl group or a tert.-Butyl group.
- 26. (New) Compounds of claim 1 where R<sup>6</sup> represents a hydrogen atom, a hydroxyl group or a methyl group.

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- 27. (New) Compounds according to claim 1, characterized in that  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$ , independent from one another, represent a -linear or branched  $C_{1-6}$  alkyl group.
- 28. (New) Compounds according to claim 1, characterized in that  $R^7$ ,  $R^8$ ,  $R^9$ ,  $R^{10}$ , independent from one another, represent a methyl group or an ethyl group.

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### III. REMARKS

Claims 1-28 are currently pending in the instant application. Claims 11-22 have been withdrawn. Claims 23-28 have been added.

## Election/Restrictions

The examiner states that the Markush Group set forth in the claims includes both independent and distinct inventions, and patentably distinct compounds (species) within each invention far too numerous to list individually. Further, the examiner states that each of these inventions contains a plurality of patentably distinct compounds, which are too numerous to list individually. The examiner has therefore required restriction pursuant to 35 U.S.C. § 121 to one of the following inventions:

- I. Claims 1-10, drawn to compounds of formula (I), classified class 548, subclasses 950, 952 and 953.
- II. Claim 11, drawn to a process for preparing compounds of formula I, classified in class 548, subclasses 950,952 and 953.
- III. Claims 12-11, drawn to a medicament comprising at least one azetidine compound of claim 1 and optionally one or more pharmaceutically acceptable carriers, classified in class 514, subclass 210.17.
- IV. Claims 18-22, drawn to the use of at least one substituted azetidine compounds according to claim 1, classified in class 514, subclass 210.17.

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Applicant elects group I, claims 1-10.

The examiner has also required election of a single species. In response, applicant elects (3, 5-di-tert-butyl-4-hydroxy-phenyl)-(3-hydroxy-azetidin-1-yl)-methanone, which is the first identified compound in claim 10.

Material identified as preferred in the pending claims has been removed and placed in new dependent claims.

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

Geza C. Zieglek

Reg. No. 44,004

Date

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### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date indicated below as first class mail in an envelope addressed to the Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

January 6,2006

Signature: